

What is claimed is:

1. A method of treating a subterranean formation comprising the steps of:  
providing a servicing fluid comprising carbon dioxide and a hydrocarbon blend,  
wherein the hydrocarbon blend comprises at least about 65% hydrocarbons having from six carbons ( $C_6$ ) to eleven carbons ( $C_{11}$ ); and  
placing the servicing fluid into the subterranean formation.
2. The method of claim 1 wherein the hydrocarbon blend comprises at least about 65% hydrocarbons having from seven carbons ( $C_7$ ) to ten carbons ( $C_{10}$ ).
3. The method of claim 1 wherein about 85% of the hydrocarbon blend comprises hydrocarbons having eight carbons ( $C_8$ ), hydrocarbons having nine carbons ( $C_9$ ), or a mixture of hydrocarbons having eight carbons ( $C_8$ ) and hydrocarbons having nine carbons ( $C_9$ ).
4. The method of claim 1 wherein the hydrocarbon blend has a Reid Vapor pressure below about 2 psi.
5. The method of claim 1 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having more than ten carbons ( $C_{10}$ ).
6. The method of claim 1 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having fewer than seven carbons ( $C_7$ ).
7. The method of claim 1 wherein the servicing fluid further comprises a gelling agent present in an amount in the range of from about 0.1% to about 2.5% by weight of the hydrocarbon blend.
8. The method of claim 7 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of a alkylphosphonic acid ester.
9. The method of claim 7 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of an orthophosphoric acid ester.
10. The method of claim 7 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of an unsymmetrical dialkylphosphinic acid.
11. The method of claim 1 wherein the servicing fluid further comprises a LPG fluid.
12. The method of claim 1 wherein the servicing fluid further comprises particulates.
13. The method of claim 1 wherein the servicing fluid further comprises a delayed gel breaker.

14. The method of claim 1 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having fewer than seven carbons ( $C_7$ ), about 5% hydrocarbons having seven carbons ( $C_7$ ); about 44% hydrocarbons having eight carbons ( $C_8$ ); about 43% hydrocarbons having nine carbons ( $C_9$ ); about 8% hydrocarbons having ten carbons ( $C_{10}$ ); and less than about 1% hydrocarbons having more than ten carbons ( $C_{10}$ ).

15. The method of claim 14 wherein the hydrocarbon blend comprises substantially no hydrocarbons having more than eleven carbons ( $C_{11}$ ).

16. The method of claim 1 wherein the servicing fluid comprises from about 30 volume % to about 80 volume % carbon dioxide by volume of hydrocarbon blend.

17. A method of fracturing a subterranean formation comprising the step of placing a fracturing fluid comprising carbon dioxide and a hydrocarbon blend into the subterranean formation at a pressure sufficient to create at least one fracture therein wherein the hydrocarbon blend comprises at least about 65% hydrocarbons having from six carbons (C<sub>6</sub>) to eleven carbons (C<sub>11</sub>).

18. The method of claim 17 wherein the hydrocarbon blend comprises at least about 65% hydrocarbons having from seven carbons (C<sub>7</sub>) to ten carbons (C<sub>10</sub>).

19. The method of claim 17 wherein about 85% of the hydrocarbon blend comprises hydrocarbons having eight carbons (C<sub>8</sub>), hydrocarbons having nine carbons (C<sub>9</sub>), or a mixture of hydrocarbons having eight carbons (C<sub>8</sub>) and hydrocarbons having nine carbons (C<sub>9</sub>).

20. The method of claim 17 wherein the hydrocarbon blend has a Reid Vapor pressure below about 2 psi.

21. The method of claim 17 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having more than 10 carbons (C<sub>10</sub>).

22. The method of claim 17 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having fewer than seven carbons (C<sub>7</sub>).

23. The method of claim 17 wherein the fracturing fluid further comprises a gelling agent present in an amount in the range of from about 0.1% to about 2.5% by weight of the hydrocarbon blend.

24. The method of claim 23 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of a alkylphosphonic acid ester.

25. The method of claim 23 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of an orthophosphoric acid ester.

26. The method of claim 23 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of an unsymmetrical dialkylphosphinic acid.

27. The method of claim 17 wherein the fracturing fluid further comprises a LPG fluid.

28. The method of claim 17 wherein the fracturing fluid further comprises particulates.

29. The method of claim 17 wherein the fracturing fluid further comprises a delayed gel breaker.

30. The method of claim 17 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having fewer than seven carbons ( $C_7$ ), about 5% hydrocarbons having seven carbons ( $C_7$ ); about 44% hydrocarbons having eight carbons ( $C_8$ ); about 43% hydrocarbons having nine carbons ( $C_9$ ); about 8% hydrocarbons having ten carbons ( $C_{10}$ ); and less than about 1% hydrocarbons having more than ten carbons ( $C_{10}$ ).

31. The method of claim 30 wherein the hydrocarbon blend comprises substantially no hydrocarbons having more than eleven carbons ( $C_{11}$ ).

32. The method of claim 17 wherein the servicing fluid comprises from about 30 volume % to about 80 volume % carbon dioxide.

33. A method of placing a gravel pack in a subterranean zone comprising the steps of:  
providing a gravel pack composition comprising gravel particles, carbon dioxide,  
and a hydrocarbon blend wherein the hydrocarbon blend comprises at least about 65%  
hydrocarbons having from six carbons ( $C_6$ ) to eleven carbons ( $C_{11}$ ); and,  
introducing the gravel pack composition into the well bore so that the gravel  
particles form a gravel pack substantially adjacent to the well bore.
34. The method of claim 33 wherein the hydrocarbon blend comprises at least about  
65% hydrocarbons having from seven carbons ( $C_7$ ) to ten carbons ( $C_{10}$ ).
35. The method of claim 33 wherein about 85% of the hydrocarbon blend comprises  
hydrocarbons having eight carbons ( $C_8$ ), hydrocarbons having nine carbons ( $C_9$ ), or a mixture of  
hydrocarbons having eight carbons ( $C_8$ ) and hydrocarbons having nine carbons ( $C_9$ ).
36. The method of claim 33 wherein the hydrocarbon blend has a Reid Vapor  
pressure below about 2 psi.
37. The method of claim 33 wherein the hydrocarbon blend comprises less than about  
1% hydrocarbons having more than ten carbons ( $C_{10}$ ).
38. The method of claim 33 wherein the hydrocarbon blend comprises less than about  
1% hydrocarbons having fewer than seven carbons ( $C_7$ ).
39. The method of claim 33 wherein the gravel composition further comprises a  
gelling agent present in an amount in the range of from about 0.1% to about 2.5% by weight of  
the hydrocarbon blend.
40. The method of claim 39 wherein the gelling agent comprises a ferric iron or  
aluminum polyvalent metal complex of an alkylphosphonic acid ester.
41. The method of claim 39 wherein the gelling agent comprises a ferric iron or  
aluminum polyvalent metal complex of an orthophosphoric acid ester.
42. The method of claim 39 wherein the gelling agent comprises a ferric iron or  
aluminum polyvalent metal complex of an unsymmetrical dialkylphosphinic acid.
43. The method of claim 33 wherein the gravel composition further comprises a LPG  
fluid.
44. The method of claim 33 wherein the gravel composition further comprises  
particulates.

45. The method of claim 33 wherein the gravel composition further comprises a delayed gel breaker.

46. The method of claim 33 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having fewer than seven carbons ( $C_7$ ), about 5% hydrocarbons having seven carbons ( $C_7$ ); about 44% hydrocarbons having eight carbons ( $C_8$ ); about 43% hydrocarbons having nine carbons ( $C_9$ ); about 8% hydrocarbons having ten carbons ( $C_{10}$ ); and less than about 1% hydrocarbons having more than ten carbons ( $C_{10}$ ).

47. The method of claim 46 wherein the hydrocarbon blend comprises substantially no hydrocarbons having more than eleven carbons ( $C_{11}$ ).

48. The method of claim 33 wherein the servicing fluid comprises from about 30 volume % to about 80 volume % carbon dioxide.

49. A method of drilling in a subterranean zone comprising the steps of:  
providing a drill-in fluid comprising carbon dioxide and a hydrocarbon blend wherein the hydrocarbon blend comprises at least about 65% hydrocarbons having from six carbons ( $C_6$ ) to eleven carbons ( $C_{11}$ ); and,  
drilling into a formation using the drill-in fluid so as to create a well bore penetrating a producing formation.

50. The method of claim 49 wherein the hydrocarbon blend comprises at least about 65% hydrocarbons having from seven carbons ( $C_7$ ) to ten carbons ( $C_{10}$ ).

51. The method of claim 49 wherein about 85% of the hydrocarbon blend comprises hydrocarbons having eight carbons ( $C_8$ ), hydrocarbons having nine carbons ( $C_9$ ), or a mixture of hydrocarbons having eight carbons ( $C_8$ ) and hydrocarbons having nine carbons ( $C_9$ ).

52. The method of claim 49 wherein the hydrocarbon blend has a Reid Vapor pressure below about 2 psi.

53. The method of claim 49 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having more than ten carbons ( $C_{10}$ ).

54. The method of claim 49 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having fewer than seven carbons ( $C_7$ ).

55. The method of claim 49 wherein the drill-in fluid further comprises a gelling agent present in an amount in the range of from about 0.1% to about 2.5% by weight of the hydrocarbon blend.

56. The method of claim 55 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of an alkylphosphonic acid ester.

57. The method of claim 55 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of an orthophosphoric acid ester.

58. The method of claim 55 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of an unsymmetrical dialkylphosphinic acid.

59. The method of claim 49 wherein the drill-in fluid further comprises a LPG fluid.

60. The method of claim 49 wherein the drill-in fluid further comprises a delayed gel breaker.

61. The method of claim 49 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having fewer than seven carbons ( $C_7$ ), about 5% hydrocarbons having seven

carbons ( $C_7$ ); about 44% hydrocarbons having eight carbons ( $C_8$ ); about 43% hydrocarbons having nine carbons ( $C_9$ ); about 8% hydrocarbons having ten carbons ( $C_{10}$ ); and less than about 1% hydrocarbons having more than ten carbons ( $C_{10}$ ).

62. The method of claim 61 wherein the hydrocarbon blend comprises substantially no hydrocarbons having more than eleven carbons ( $C_{11}$ ).

63. The method of claim 49 wherein the servicing fluid comprises from about 30 volume % to about 80 volume % carbon dioxide.



64. A subterranean servicing fluid comprising carbon dioxide and a hydrocarbon blend wherein the hydrocarbon blend comprises and at least about 65% hydrocarbons having from six carbons ( $C_6$ ) to eleven carbons ( $C_{11}$ ).

65. The servicing fluid of claim 64 wherein the hydrocarbon blend comprises at least about 65% hydrocarbons having from seven carbons ( $C_7$ ) to ten carbons ( $C_{10}$ ).

66. The method of claim 64 wherein about 85% of the hydrocarbon blend comprises hydrocarbons having eight carbons ( $C_8$ ), hydrocarbons having nine carbons ( $C_9$ ), or a mixture of hydrocarbons having eight carbons ( $C_8$ ) and hydrocarbons having nine carbons ( $C_9$ ).

67. The servicing fluid of claim 64 wherein the hydrocarbon blend has a Reid Vapor pressure below about 2 psi.

68. The servicing fluid of claim 64 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having more than ten carbons ( $C_{10}$ ).

69. The servicing fluid of claim 64 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having fewer than seven carbons ( $C_7$ ).

70. The method of claim 64 wherein the servicing fluid further comprises a gelling agent present in an amount in the range of from about 0.1% to about 2.5% by weight of the hydrocarbon blend.

71. The method of claim 70 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of an alkylphosphonic acid ester.

72. The method of claim 70 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of an orthophosphoric acid ester.

73. The method of claim 70 wherein the gelling agent comprises a ferric iron or aluminum polyvalent metal complex of an unsymmetrical dialkylphosphinic acid.

74. The servicing fluid of claim 64 wherein the servicing fluid further comprises a LPG fluid.

75. The servicing fluid of claim 64 wherein the servicing fluid further comprises particulates.

76. The servicing fluid of claim 64 wherein the servicing fluid further comprises a delayed gel breaker.

77. The servicing fluid of claim 64 wherein the hydrocarbon blend comprises less than about 1% hydrocarbons having fewer than seven carbons ( $C_7$ ), about 5% hydrocarbons

having seven carbons ( $C_7$ ); about 44% hydrocarbons having eight carbons ( $C_8$ ); about 43% hydrocarbons having nine carbons ( $C_9$ ); about 8% hydrocarbons having ten carbons ( $C_{10}$ ); and less than about 1% hydrocarbons having more than ten carbons ( $C_{10}$ ).

78. The servicing fluid of claim 77 wherein the hydrocarbon blend comprises substantially no hydrocarbons having more than eleven carbons ( $C_{11}$ ).

79. The method of claim 64 wherein the servicing fluid comprises from about 30 volume % to about 80 volume % carbon dioxide.